

Amendments To The Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A separator for separating a multiphase flowfluid into selected lighter and heavier fluids, the separator comprising:
a circular tubular having a downwardly facing outer section, an upwardly facing inner section, a tubular bore, and an inlet for the multiphase fluid to flow into the tubular bore;
a plurality of outlets, at least one for each selected separated phase; and
the flow through the tubular bore causing a main annular tubular bore through which the multiphase fluidflow is caused to flow and to separate into selected lighter and heavier fluids, the circularmain annular tubular bore having a tangential outlet on the upwardly facing inner section in the direction of flow to separate selectedan outlet for each of the lighter fluids and a tangential outlet on the downwardly facing outer section in the direction of flow to separate selected heavier fluids.
2. (currently amended) A separator according to claim 1, wherein the inlet is a tangential entry, thereby causing the fluid to circulate through the main annular tubular bore.
3. (currently amended) A separator according to claim 1, wherein the flow area of the main annular tubular bore diameter is at least twice the flow area of the inlet to allow a stable rotating flow to establish.
4. (canceled)
5. (canceled)
6. (currently amended) A separator according to claim 1, further comprising anothera first additional tubular bore located below, and in fluid communication with, the heavier fluid outlet, the another tubularfirst additional bore causing further separation of the flow into lighter and heavier fluids and having an outlet for each of the lighter and heavier fluids.

7. (currently amended) A separator according to claim 1, further comprising another a second additional tubular bore located above, and tangentially in fluid communication with, the lighter fluid outlet, the another tubular second additional bore causing further separation of the flow into lighter and heavier fluids and having an outlet for each of the lighter and heavier fluids.
8. (currently amended) A separator according to claim 6, wherein the inlet into the another tubular first additional bore is tangential.
9. (currently amended) A separator according to claim 1, further comprising a spiral conduit connected to at least one of the outlets, the spiral conduit having a smaller flow diameter than any of the circular annular tubular bores, thereby increasing the fluid velocity to enable further separation of the fluids into the selected lighter and heavier fluids desired phases.
10. (currently amended) A separator according to claim 9, wherein the spiral conduit includes a plurality of parallel coils having a common diameter ~~is a parallel sided spiral coil having the same coil diameter as the spiral coil above~~ to allow the flow to stabilize.
11. (currently amended) A separator according to claim 9, wherein the spiral conduit includes a plurality of tapered coils having consecutive reduced outer diameters ~~each conduit defines an envelope, at least part of the envelope being tapered such that the diameters of consecutive loops of the conduit are reduced~~.
12. (previously presented) A separator according to claim 9, wherein the bore diameter of the conduit is reduced in the direction of flow therethrough.
13. (currently amended) A separator according to claim 9, wherein the parallel and tapered coils have a slope at an angle ~~angle of slope of the pipework in the coil of the spiral relative to the circular tubular annular bore(s), the angle increasing increases~~ as the fluid flows through the spiral conduit to control the flow from a relative to the previous coil section.
14. (currently amended) A separator according to claim 9, further comprising ~~of~~ one or more outlets from the spiral conduit to allow for the further separation of lighter and heavier fluids.

15. (currently amended) A separator according to claim 9, further comprising one or more drain and/or vent conduits communicating from the spiral ~~each conduit with another~~ into a tubular bore.

16. (currently amended) A separator according to claim 15, wherein the drain and/or vent conduits exit the spiral conduit ~~one conduit(s)~~ tangentially and in the direction of flow to collect the selected lighter or heavier fluid required phase.

17. (currently amended) A separator according to claim 1, further comprising a slurry ~~an~~ outlet on the spiral conduit for the removal of a solid slurry.

18. (currently amended) A separator according to claim 1, wherein the circular annular tubular bore(s) ~~is substantially horizontal~~ ~~(are)~~ circular.

19. (currently amended) A separator according to claim 7, wherein the ~~inlet into the second additional~~ ~~another~~ tubular has a ~~bore~~ is tangential inlet.